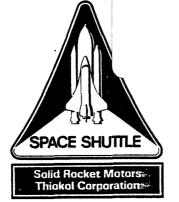
(NASA-CR-192580) POSTFLIGHT HARDWARE EVALUATION 360T025 (RSRM-25, STS-46). APPENDIX D: NOZZLE POSTFIRE DATA Final Report (Thiokol Corp.) 15 p

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# Appendix D Nozzle Postfire Data

# Final Postflight Hardware Evaluation Report 360T025 (RSRM-25, STS-46)

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SPACE OPERATIONS

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## APPENDIX D NOZZLE POSTFIRE DATA

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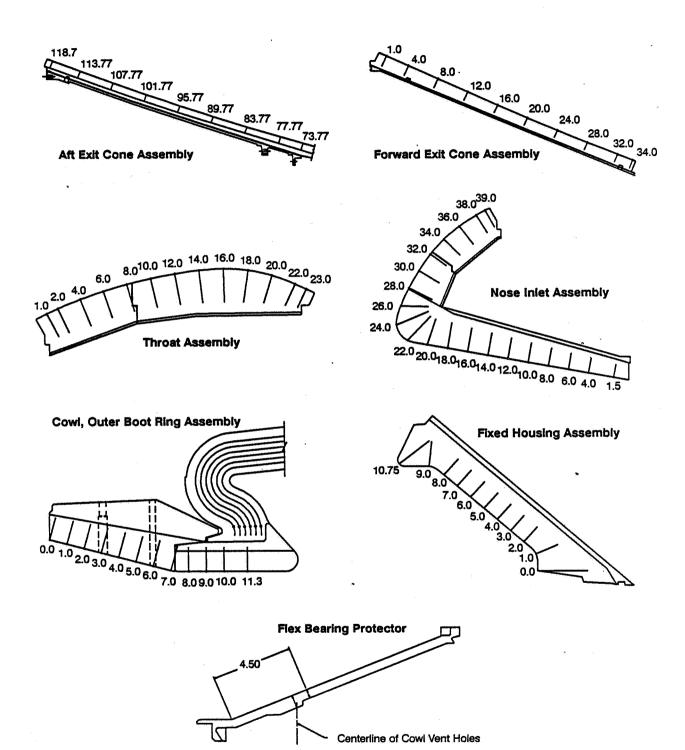


Figure D-1. RSRM Nozzle Liner Char and Erosion Station Locations



Table D-I. 360T025A Forward Exit Cone Assembly Char and Erosion Data

Angular Location		tations			
0 degrees	1.0	4.0	4.6		
Measured Erosion	0.32				
Measured Char	0.73				
Adjusted Char *	0.58				
Denomenator	1.27				
RSRM Liner Thickness	1.807	1.731	1.411		
Margin of Safety	0.42				
90 degrees					
Measured Erosion	0.40				
Measured Char	0.72		4		
Adjusted Char *	0.58				74
Denomenator	1.40				
RSRM Liner Thickness	1.807	1.731	1.411		•
Margin of Safety	0.29				
180 degrees					
Measured Erosion	0.29				
Measured Char	0.77				
Adjusted Char •	0.62				
Denomenator	1.26			•	
RSRM Liner Thickness	1.807	1.731	1.411		
Margin of Safety	0.43				
270 degrees					
Measured Erosion	0.39	0.40	0.39		•
Measured Char	0.71	0.68	0.70		•
Adjusted Char •	0.57	0.54	0.56		
Denomenator	1.37	1.36	1.15		
RSRM Liner Thickness	1.807	1.731	1.411	•	
Margin of Safety	0.32	0.27	0.23		
Minimum margin of saf					
Maximum margin of saf	ery is 0	. 43 AC .S	CACLOR	1.00 degree	190.00
* Mea	sured ch	ar adjus	ted to	end of action	n time
			minim	um liner thi	ckness



Table D-II. 360T025B Forward Exit Cone Assembly Char and Erosion Data

Angular Location		Statio	ons		
0 degrees	1.0	4.0	4.6	8.0	
Measured Erosion	0.37	0.36	0.36	0.34	
Measured Char	0.76	0.70	0.69	0.74	
Adjusted Char *	0.61	0.56	0.55	0.59	
Denomenator	1.39	1.31	1.09	1.32	
RSRM Liner Thickness	1.807	1.731	1.411	1.629	
Margin of Safety	0.30	032	0.29	0.24	
90 degrees			•		
Measured Erosion	0.35	0.35	0.34		et .
Measured Char	0.83	0.73	0.71		
Adjusted Char *	0.66	0.58	0.57		
Denomenator	1.43	1.32			
RSRM Liner Thickness		1.731		1.629	
Margin of Safety	0.27	0.31	0.31		
180 degrees					
Measured Erosion	0.35	0,.38	0.36	0.30	
Measured Char	0.75	0.73		0.78	
Adjusted Char •	0.60	0.58	0.55	0.62	
Denomenator	1.35	1.38 1.731	1.09	1.29	
RSRM Liner Thickness	1.807 0.34	0.26	1.411	0.26	
Margin of Safety	0.34	U.26	0.29	U.26	
270 degrees					
Measured Erosion	0.37	0.36	0.37	0.33	
Measured Char	0.79	0.74	0.73	0.73	
Adjusted Char •	0.63	0.59	0.58	0.58	
Denomenator	1.42	1.35	1.14	1.29	
RSRM Liner Thickness				1.629	
Margin of Safety	0.27	0.28	0.24	0.26	
Minimum margin of sa					

Maximum margin of safety is 0.34 at station 1.00 degree 180.00

minimum liner thickness 1.70 X erosion + 1.25 X adj char \*

<sup>·</sup> Measured char adjusted to end of action time



Table D-III. 360T025A Throat Assembly Char and Erosion Data

Angular Location						Stations							
800.160p ()	1.0	2.0	1.0	9.0	0:0	10.0	12.0	14.0	16.0	10.0	20.0	22.0	23.0
Measured Erosion	1.06	1.07	1.13	1.19	1.24	1.10	1.15	1.12	1.07	1.10	0.65	0.40	0.36
Adjusted Char	0.33		0.47	0.43	0.32	6.33	0.35	0.37	0.30	97.0	0.51	09.0	0.63
Denomenator	2.53	3.66	2.85	26.2	2.67	2.17	2.74	2.70	2.61	2.77		1.55	
RSRN Liner Thickness	3.174	3.247	3.314	3.280	3.163	3.397	3.517	3.626	3.710	3.566	3.233	7	2
Hattin of Safety	0.25	0.22	91.0	0.13	0.12	6.23	0.26	0.34	6.42	0 . 29		<u>.</u>	2 T.
90 degrees													
Haassurad Eroston	1.00	1.03	1.07	1.13	1.19	1.17	1.14	1.10	1.00	0.81	0.67	9.44	0.36
Measured Char	0.50	0.55	9.0	65.0	95.0	6.53	0.4	0.53	0.57	0.65	69.0	0.79	9.12
Adjusted Char	0.38	0.41	0.46	11.0	0.41	0.10	0.36	0.40	0.43	0.52	0.55	69.0	79.0
Denomenator	2.47	2.58	2.71	2.11	2.89	2.14	2.73	2.70	5.69	2.41	2.03	1.67	1.57
BSEM Clase Thickness	3.174	3.247	3.314	3.280	3,163	3.397	3.517	3.626	3.710	3.566	3.231	2.583	7
Margin of Safety	0.29	0.26	0.23	0.17	0.10	0.20	0.29	0.34	96.3	67.0	65.0	9.55	. o
180 degrees											•		
Monsona Dannaken	66.0	1.02	1.06	1.13	1.14	1.10	1.10	1.09	1.06	0.91	0.70	0.44	0.37
Measured Char	0.61	6.55	0.58	0.54	0.53	6 . 4 5	0.43	0.53	95.0	9.5	0.63	0.78	-
Adjusted Char	0.46	0.41	0.43	0.41	0 + 0	0.34	0.33	0.40	0.43	9 .0	0.50	6.62	. 62
Denomenator	2.55	2.56	3.66	2.17	3.74	2.62	2.60	3.64	2.65	2.40	2.03	9 .	25.
RSRM Liner Thickness	3.174	3.247	3.314	3.280	3.143	3.397	3.517	3.626	3.710	3.516	3.231	2.583	-
Margin of Safety	0.24	0.27	0.24	0.19	0.15	0.30	0.35	0.35	0.40	67.0	60.0	9	6 7 9
270 degrees													
Measured Eroston	1.05	1.05	1.10	1.16	1.20	91.1	1.12	1.11	1.00	0.95	0.73	0.50	11.0
Measured Char	0.58	9.55	9.0	D. 57	0.52	0.47		0.52	95.0	0.60	9.0	0.75	9 .
Adjusted Char	0.43	0.41	0.43	0.43	0.39	0.35	0.36	0.39	7.0	-	. S	20.0	7
Denomenator	2.64	2.63	3.74	2.85	2.89	3.76	5.69	2.71	9.69	2.50	2.10	1.72	
RSRM Liner Thickness	3.174	3.247	3.314	3.280	3.103	3.397	3.517	3.626	3.710	3.546	3.231	90.0	
Hargin of Safety	0.20	0.24	0.21	0.15	0.10	6.23	0.31	0.34	9.30	- -	÷	ə •	£7.3
Minimum margin of safet		0.10 at a	station station 2	8.00 degree 270.0 22.00 degree 0.00	ree 270.0	00							-
•													

minimum liner thickness
2.00 X erosion + 1.25 X adj char e

Margin of Safety

\* Heasured char adjusted to end of action time



Table D-IV. 360T025B Throat Assembly Char and Erosion Data

Haracted Ereston 1.01 1.02 1.10 1.11 1.10 1.10 1.10 1.10	Angularation						Stations	• uo						
1.01   1.01   1.02   1.14   1.07   1.15   1.15   1.15   1.05   0.55   0.75   0.15		1.0	3.0	•	• •	0.0	10.0	12.0	14.0	16.0	11.0	20.0	22.0	23.0
Column   C		.0	9	71.1	1.07	113	1.17	1.16	1.15	1.08	96.0	0.75	91.0	0.35
try 0.17 0.13 0.12 0.11 0.13 0.15 0.15 0.15 0.15 0.15 0.16 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15			45	9	5.5	6.57	7.0	9 0	0.46	0.50	6.53	0.67	0.76	0.17
Lickness 3.174 3.247 3.314 3.280 3.183 3.799 3.517 2.63 2.65 2.171 1.00  Lon 1.06 1.10 1.17 1.20 1.21 1.31 1.397 3.517 3.62 3.710 3.86 3.731 2.593  Lon 1.06 1.10 1.17 1.20 1.21 1.31 1.397 3.517 3.62 3.710 3.86 3.731 2.593  Lon 0.59 0.62 0.63 0.934 0.53 0.44 0.47 0.49 0.55 0.57 0.41 0.46 0.49 0.70  Lon 0.59 0.62 0.63 0.41 0.12 1.11 1.20 1.17 1.00 0.59 0.50 0.70 0.70  Lot 0.44 0.47 0.43 0.41 0.49 0.19 0.19 0.10 0.49 0.40 0.40 0.40 0.40 0.40 0.40 0.4				7		7	97	5	50	9.30	0.42	15.0	9.62	0.10
try  1.06  1.10  1.06  1.10  1.07  1.08  1.17  1.08  1.17  1.09  1.17  1.09  1.19  1.09  1.19  1.09  1.19  1.09  1.19  1.09  1.19  1	אם וופרחם כשפו				77.		900		2 . 7 %	2.63	2.45	2.17	1.70	1.57
try 0.20 0.20 0.11 0.21 0.12 0.12 0.22 0.22	Denomenator								909 8	310	3.516	3.231	2.583	2 110
ton 1.06 1.10 1.17 1.20 1.21 1.121 1.20 1.35 0.35 0.35 0.35 0.35 0.35 0.45 0.40 0.70 0.38 0.35 0.44 0.47 0.43 0.41 0.39 0.35 0.35 0.35 0.35 0.35 0.35 0.35 0.35	RSKH Liner Thickness	2.17	7 . 7 . 6								9.4.6	67.0	6.52	
Low 1.06 1.10 1.17 1.20 1.21 1121 1.20 1.17 1.08 0.70 0.70 0.70 0.70 0.40 0.60 0.60 0.60 0.60 0.60 0.60 0.6	Margin of Safety	9 9	7.0	-	17.0	-	77.9	• · · · ·	· ·		•	;	;	;
ton 1.06 1.10 1.17 1.20 1.21 1121 1.20 1.17 1.08 0.90 0.70 0.38 0.57 0.61 0.78 0.59 0.62 0.57 0.54 0.55 0.47 0.49 0.55 0.55 0.57 0.61 0.79 0.59 0.50 0.50 0.57 0.51 0.59 0.55 0.57 0.61 0.79 0.59 0.50 0.50 0.50 0.50 0.50 0.50 0.5	90 dagrees.					•								
ton 1.06 1.10 1.17 1.20 1.21 1.21 1.20 1.17 1.00 0.10 0.10 0.10 0.10 0.10 0.1				•						,	,	1	;	
0.59 0.62 0.57 0.54 0.52 0.57 0.54 0.55 0.57 0.61 0.78 0.55 0.57 0.61 0.78 0.55 0.57 0.51 0.78 0.51 0.78 0.51 0.78 0.51 0.78 0.51 0.51 0.51 0.51 0.52 0.57 0.51 0.51 0.51 0.51 0.51 0.51 0.51 0.51	Heasured Eroston	1.06	1.10	1.17	0.7	1.21	1:31	1.20	1.17	70.	0 i	0.0		70
Lockness 3.174 3.247 3.314 3.280 3.183 3.397 3.284 2.80 2.60 3.710 3.286 3.231 2.583 2.67 2.67 2.79 2.81 2.81 2.80 2.67 2.69 3.710 3.286 3.231 2.583 2.97 3.280 3.710 3.286 3.731 2.583 2.97 3.280 3.780 3.280 3.790 3.286 3.731 2.583 2.90 3.183 3.397 3.280 3.790 3.286 3.731 2.583 3.297 3.280 3.790 3.286 3.731 2.583 3.297 3.280 3.790 3.286 3.731 2.806 3.231 2.806 3.231 3.280 3.28	Heasured Cher	96.0	0.62	0.57	0.54	0.52	0.17	0.17	6 T . 0	. 55	0.57	. 6	0.78	
Cokness 3.174 3.247 3.314 3.290 2.81 2.86 2.84 2.80 2.68 2.37 2.01 1.54 3.247 3.314 3.297 3.517 3.517 3.527 3.626 3.710 3.566 3.731 2.583 3.474 3.247 3.314 3.220 3.183 3.397 3.517 3.626 3.710 3.566 3.731 2.583 3.474 0.19 0.17 0.15 0.13 0.09 0.19 0.24 0.30 0.19 0.24 0.30 0.19 0.10 0.19 0.24 0.30 0.51 0.40 0.41 0.40 0.47 0.40 0.47 0.40 0.43 0.41 0.42 0.43 0.41 0.42 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.47 0.40 0.40		17.0	0.47	0.43	0.41	0.39	0.35	0.35	0.37	0.41	97.0	67.0	6.62	0.62
low	Denomenator	2.67	2.78	2.87	2.91	2.91	3.86	2.04	2. 80	2.61	2.37	2.01	1.54	1.12
lon 1.07 1.13 1.17 1.20 1.22 1.17 1.19 1.16 1.05 0.39 0.51 0.61 0.68 1 0.68 0.69 0.19 0.19 0.19 0.19 0.24 0.30 0.39 0.51 0.61 0.68 0.69 0.69 0.69 0.70 0.43 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.6	BSBH Liner Thickness	3.174	3.247	3.314	3.280	3.163	3.397	3.517	3.626	3.710	3.586	3.231	2.513	2.110
lon 1.07 1.13 1.17 1.20 1.22 1.17 1.19 1.16 1.05 0.92 0.70 0.43 0.40 0.64 0.64 0.65 0.65 0.56 0.56 0.56 0.56 0.57 0.64 0.75 0.64 0.75 0.64 0.65 0.65 0.65 0.64 0.75 0.64 0.75 0.64 0.45 0.41 0.41 0.41 0.41 0.41 0.41 0.41 0.41	Margin of Safato	0.19	0.17	0.15	0.13	69.0	0.19	0.24	0.30	0.39	0.51	0.61	9.0	67.0
ton 1.07 1.13 1.17 1.20 1.22 1.17 1.19 1.16 1.05 0.92 0.70 0.43  0.64 0.62 0.60 0.57 0.54 0.56 0.55 0.59 0.61 0.47 0.64 0.75  1.040 0.47 0.45 0.43 0.41 0.42 0.41 0.43 0.41 0.38 0.51 0.60  1.040 0.47 0.45 0.43 0.41 0.42 0.41 0.43 0.41 0.38 0.51 0.60  1.040 0.47 0.45 0.43 0.41 0.42 0.41 0.43 0.41 0.38 0.41 0.39 0.51 0.60  1.040 0.40 0.47 0.45 0.43 0.41 0.42 0.41 0.42 0.41 0.42 0.60 0.60  1.040 0.40 0.40 0.40 0.40 0.40 0.40 0.40				1										
lon 1.07 1.13 1.17 1.20 1.22 1.17 1.19 1.16 1.05 0.92 0.70 0.43 0.64 0.65 0.64 0.65 0.56 0.56 0.56 0.56 0.56 0.56 0.56	180 dagrees													
0.64 0.62 0.60 0.57 0.54 0.55 0.50 0.54 0.47 0.64 0.75 0.50 0.64 0.75 0.41 0.42 0.41 0.43 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.45 0.41 0.42 0.41 0.42 0.41 0.42 0.41 0.42 0.45 0.40 0.55 0.50 0.60 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.4		1 0.7	1.13	1.17	1.20	1.22	1.17	1.19	1.16	1.05	0.93	0.70	0.43	0.37
Lickness 3.174 3.247 3.314 3.280 3.183 3.397 3.517 3.626 2.31 2.041 0.38 0.51 0.60 2.74 2.74 2.84 2.90 2.93 2.95 2.95 2.90 2.21 0.27 0.42 0.41 0.43 0.41 0.50 1.61 2.04 1.61 2.04 2.74 2.31 2.04 1.61 2.04 2.74 2.31 2.04 2.90 2.95 2.90 2.74 2.21 2.04 1.61 2.04 2.04 2.04 2.04 2.04 2.04 2.04 2.04	Measured Char	9.0	0.62	0.60	0.57	0.54	9.26	0.55	0.50	0.54	0.47	79.0	0.75	9.78
1.20 1.20 2.86 2.61 2.31 2.04 1.61 2.52 2.86 3.710 3.586 3.231 2.04 1.61 2.31 2.74 2.84 2.90 2.85 2.86 2.81 3.85 3.231 2.04 1.61 2.74 2.84 3.247 3.314 3.240 3.183 3.397 3.517 3.626 3.710 3.586 3.231 2.04 1.61 2.85 3.174 3.247 3.314 3.240 3.183 3.397 3.517 3.626 3.710 3.586 3.710 3.586 3.710 3.586 3.710 3.586 3.710 3.626 3.710 3.586 3.731 2.563 3.626 3.710 3.626 3.710 3.666 3.	a saut metaline.	44	0.47	0.45	0.43	11.0	0.43	0.43	6.43	0.42	0.34	- 51	09.0	0.62
.197 3.517 3.626 3.710 3.586 3.231 2.583 .19 0.21 0.27 0.42 0.55 0.58 0.60 .20 1.20 1.21 1.14 1.02 0.80 0.52 .46 0.49 0.51 0.51 0.50 0.61 0.75 .36 0.37 0.38 0.38 0.46 0.49 0.63 .85 2.86 2.90 2.76 2.62 0.49 0.63 .397 3.517 3.626 3.710 3.586 3.231 2.563 .19 0.23 0.25 0.35 0.37 0.46 0.41	7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	7.		2 90	2	2 9 5	2.46	2.90	2.86	2.61	2.31	7.04	1.61	1.52
20 1.20 1.21 0.27 0.42 0.55 0.56 0.60 0.60 0.21 0.27 0.42 0.55 0.56 0.50 0.60 0.52 0.51 0.59 0.61 0.79 0.51 0.59 0.61 0.79 0.51 0.59 0.63 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	TO THE PROPERTY OF THE PARTY OF	7.	7.247	7	3.240		3 . 39 7	3.517	3.626	3.710	3.586	3.231	2.583	2.110
.20 1.20 1.21 1.14 1.02 0.60 0.52 0.46 0.49 0.51 0.51 0.50 0.61 0.79 0.36 0.37 0.38 0.46 0.46 0.49 0.63 0.39 0.46 0.49 0.63 0.39 0.30 0.30 0.35 0.37 0.46 0.41 0.21 0.25 0.35 0.37 0.46 0.41	Margin of Safery	0.16	0.14	1	0.13	90.0	61.0	0.21	0.27	0.42	9.55	0.51	09.0	0.39
.20 1.20 1.21 1.14 1.02 0.80 0.52 0.45 0.49 0.51 0.51 0.58 0.61 0.79 0.36 0.37 0.38 0.46 0.46 0.49 0.63 0.35 2.86 2.96 2.76 2.62 2.21 1.83 0.39 7.3.517 3.626 0.35 0.35 0.37 0.46 0.41 0.41 0.22 0.35 0.37 0.46 0.41	270 degraes													
.46 0.49 0.51 0.59 0.61 0.79 0.46 0.49 0.79 0.46 0.37 0.38 0.46 0.49 0.63 0.59 0.49 0.63 0.39 0.46 0.49 0.63 0.39 0.35 0.37 0.46 0.41 0.41 0.42 0.35 0.35 0.37 0.46 0.41							1 20	1.20	1.21	1.14	1.02	0.10	0.52	6 7
.36 0.37 0.38 0.38 0.46 0.49 0.63 6 1.85 2.86 2.90 2.76 2.62 2.21 1.03 1.39 3.517 3.626 3.710 3.586 3.231 2.563 1.19 0.23 0.25 0.35 0.37 0.46 0.41					•		4	64.4		15.0	0.58	0.61	60.0	0.73
.85 2.86 2.90 2.76 2.62 2.21 3.93 1.397 3.517 3.626 3.710 3.586 3.231 2.583 2.583 2.583 0.23 0.25 0.35 0.37 0.46 0.41 6	A SAME TO LOCK THE						0.36	0.37	0.38	0.38	91.0	67.0	6.63	0.62
.397 3.517 3.626 3.710 3.546 3.231 2.583 2.19 0.23 0.25 0.35 0.37 0.46 0.41 6							2.15	2.86	2.90	2.76	2.62	2.21	1.03	1.75
.19 0.23 0.25 0.35 0.37 0.46 0.41		174	1.243	7117	3.280		3.397	3.517	3.626	3.710	3.546	3.231	2.583	2.110
Minimum margin of safety is 0.08 at station 8.00 degree 180.00 Maximum margin of safety is 0.68 at station 22.00 degree 90.00	Margin of Safety						0.19	0.23	0.25	0.35	0.37	91.0	17.0	0.21
	Minimum margin of saf	fety is	0.08 At a	tation	8.00 deg	ree 180.								
		•												

2.00 X erosion + 1.25 X adj char

Margin of Safety



Table D-V. 360T025A Nose Inlet rings (-503, -504) Char and Erosion Data

Angular Location			Stat	ions			•
0 degrees	28.0	30.0	32.0	34.0	36.0	38.0	39.0
Measured Erosion	1.15	0.85	0.86	0.81	0.92	0.98	0.99
Measured Char	0.61	0.68	0.54	0.43	0.49	0.52	0.60
Adjusted Char *	0.46	0.51	0.41	0.32	0.37	0.39	0.45
Denomenator	2.87	2.34	2.23	2.02	2.30	2.45	2.54
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety	0.22	0.39	0.33	0.57	0.39	0.24	0.18
90 degrees						*E	
Measured Erosion	1.05	0.82	0.90	0.85	0.90	0.99	1.03
Measured Char	0.71	0.68	0.63	0.49	0.52	0.57	0.60
Adjusted Char *	0.53	0.51	0.47	0.37	0.39	0.43	0.45
Denomenator	2.77	2.28		2.16	2.29	2.51	2.62
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety	0.27	0.43	0.23	0.47	0.40	0.20	0.14
180 degrees							
Measured Erosion	0.97	0.77	0.85	0.79	0.84	0.91	0.92
Measured Char	0.65	0.68	0.57	0.49	0.51	0.55	0.50
Adjusted Char • .	0.49	0.51	0.43	0.37	0.38	0.41	0.38
Denomenator	2.55	2.18	2.23	2.04	2.16	2.34	2.31
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety'	0.38	0 . 49	0.32	0.56	0.48	0.30	0.30
270 degrees							
Measured Erosion	1.04	0.86	0.92	0.88	0.89	0.99	0.99
Measured Char	0.73	0.64	0.58	0.47	0.53	0.53	0.59
Adjusted Char •	0.55	0.48	0.43	0.35	0.40	0.40	0.44
Denomenator	2.76	2.32	2.38	2.20	2.28	2.48	2.53
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety	0.27	0.40	0.24	0.45	0.41	0.22	0.18

<sup>\*</sup> Measured char adjusted to end of action time



Table D-VI. 360T025B Nose Inlet rings (-503, -504) Char and Erosion Data

Angular Location			Stat	ions			
0 degrees	28.0	30.0	32.0	34.0	36.0	38.0	39.0
Measured Erosion	0.98	0.81	0.94	0.83	0.81	0.91	0.92
Measured Char	0.79	0.68	0.55	0.55	0.57	0.58	0.57
Adjusted Char •	0.59	0.51	0.41	0.41	0.43	0.43	0.43
Denomenator	2.70	2.26	2.40	2.18	2.15	2.36	2.37
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety	0.30	0.44	0.23	0.46	0.49	0.28	0.26
90 degrees							
Measured Erosion	1.04	0.83	0.89	0.86	0.87	0.91	0.95
Measured Char	0.78	0.70	0.63	0.53	0.54	0.59	0.61
Adjusted Char *	0.59	0.53	0.47	0.40	0.41	0.44	0.46
Denomenator	2.81	2.32	2.37	2.22	2.25	2.37	2.47
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety	0.25	0.40	0.24	0.44	0.42	0.28	0.21
180 degrees							
Measured Erosion	1.06	0.90	0.94	0.86	0.90	0.90	0.92
Measured Char	0.77	0.68	0.59	0.49	0.47	0.57	0.62
Adjusted Char •	0.58	0.51	0.44	0.37	0.35	0.43	0.47
Denomenator	2.84	2.44	2.43	2.18	2.24	2.33	2.42
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety	0.23	0.33	0.21	0.46	0.43	0.30	0.24
270 degrees							
Measured Erosion		0.88	0.91	0.85	0.87	0.94	0.97
Measured Char	1.80	0.72	0.60	0.53	0.53	0.52	0.60
Adjusted Char *	1.35	0.54	0.45	0.40	0.40	0.39	0.45
Denomenator		2.44	2.38	2.20	2.24	2.37	2.50
RSRM Liner Thickness	3.508	3.252	2.950	3.182	3.200	3.026	3.000
Margin of Safety		0.34	0.24	0.45	0.43	0.28	0.20

<sup>\*</sup> Measured char adjusted to end of action time



Table D-VII. 360T025A Nose Cap Char and Erosion Data

Angular Location						Stations	e uo 1						
0 degrees	1.5	. +	9.9	•	10.0	12.0	11.0	3.6.0	11.0	20.0	22.0	24.0	36.0
Heasured Erosion	•	0.32	0.39	0.4	97.0	9.0	0.52	0.79	0.69	1.05	1.75	1.95	1.45
Heasured Char	0.79	0.55	0.57	0.54	6.54	0.43	0.54	91.0	0.43	0.43	9. 16	9.7	0.13
Adjusted Char	0.63		91.0	0.43	0.43	0.34	0.43	0.37	0.34	0.34	19.0	65.0	0.61
Denomenator		1.19	1.35	1.50	1.50	1.54	1.54	2.04	2.21	2.53	4.26	79.7	3.67
RSBM Liner Thickness	1.776	2.038	2.248	3.450	2.668	2.878	3.011	3.298	3.507	4.055	4.713	1.69.1	3.163
Hargin of Safety		0.71	0.67	19.0	0.16	0.17	6.95	0.62	65.0	0.60	0.11	0.01	0.05
see a 5 ep 0.6				-									
neasured Eroston		0.35	0.33	0.39	0.13	9.45	05.0	0.58	99.0	0.84	1.34	1.54	1.06
Heasured Char	0.11	0.54	0.56	0.52	0.50	0.45	0.40	91.0	0.46	0.41	0.50	0.63	0.67
Adjusted Char	0.65	0.13	0.45	0.42	0.40	0.36	0.38	0.37	0.37	0.33	97.0	0.50	0.50
Denomenator		1.24	1.22	1.30	1.36	1.35	1.41	1.62	1.76	3.09	3.26	3.71	2.75
RSHM Liner Thickness	1.776	2.038	2.248	2.454	2.668	2.171	3.008	3.296	3.507	4.055	4.713	1.69.1	3.463
Margin of Safety		0.64	10.0	6.0	96.0	1.13	1.09	1.01	0.97	0.94	ST. 0	9.76	. <del>.</del>
180 dagrees					•					**			
Measured Eroston		0.27	0.31	96.0	0.38	0.43	0.43	0.58	0.60	0.79	1.24	1.51	1.05
Heasured Char	0.13	65.0	0.59	95.0	0.60	0.48	0.17	0.45	77.0	0.37	0.63	9.0	9.0
Adjusted Char *	99.0	0.47	0.47	0.45	9.	0.38	9	0.36	9.35	0.30	0.52	9.20	10.0
Denomenator		1.13	1.31	1.28	1.36	1.34	1.33	1.61	1.64	1.95	. 13	M . 65	2.74
RSRM Liner Thickness	1.776	2.030	2.248	2.131	3.668	2.176		3.29	3.507		4.713	169.	
Margin of Safety		9.0	9 . 0	0.92	96.0	1.15	1.32	1.05	7:-		- - - -	67.0	-
270 degraes													
Measured Eroston		0.32	0.38	91.0	0.52	0.55	0.54	0.71	0.78	96.0	1.50	1.67	1.17
Measured Char	69.0	0.67	0.59	0.49	0.53	0.43	. T. O	0.40	0.34	0.33	9.55	0.65	6.63
Adjusted Char .	0.71	0.54	0.47	0.39	0.43	0.34	0.38	0.33	0.37	0.30	11.0	0.52	0.47
Denomenator		1.31	1.35	1.43	1.57	1.53	1.64	1.82	1.90	2.39		66.7	2.93
RSRN Liner Thickness	1.776	2.038	2.248	2.454	2.668	2.178	3.066	3.298	3.507	4.055	4.713	1.69.1	3.163
Hargin of Safety		0.56	0.67	0.74	0.10	9.0	0.11	0.61	9.19	0.11	0.33		0.33
Ninimum margin of safety Haximum margin of safety	ety is	0.01 at	station	is 0.01 at station 24.00 degree 0.00 is 1.32 at station 14.00 degree 180.0	degree 0.00 degree 180.00	99							

minimum liner thickness 2.00 x erosion + 1.25 x adj char

Hargin of Saluty

. Heasured char adjusted to end of action time

Table D-VIII. 360T025B Nose Cap Char and Erosion Data

Angular Location						Stations	<b>=</b> 00						
gesibep 0	1.5	1.0	9.9	0.4	10.0	12.0	14.0	16.0	11.0	20.0	22.0	24.0	36.0
Heasured Eroston		0.36	0.36	0.41	0.42	0.54	0.55	0.63	69.0	0.85	1.25	1.49	1.09
Maasured Char	0.92	0.54	0.57	0.54	0.53	61.0	0.50	0.43	0.41	0.45	69.0	9. 78	0.67
Adjusted Char a	0.74	0.43	91.0	0.43	0.42	0.39	0 + 0	0.34	0.33	9.36	0.55	0.62	0.50
Denomenator	•	1.26	1.29	1.36	1.37	1.57	1.60	1.69	1.79	2.15	3.19	3.76	2.81
MAN Liner Thickness	1.776	2.038	2.248	2.458	2.668	2.876	3.066	3.298	3.507	4.055	4.713	1.691	3.463
Margin of Safety		0.62	0.74	0.81	96.0	0.83	0.93	98.0	96.0	6.89	. 43	0.25	0.38
seedteep 06													
Measured Erosion		0.35	0.39	67.0	0.51	0.59	0.63	0.72	0.01	1.02	1.53	1.67	1.16
Measured Char	6.77	0.56	0.54	91.0	0.53	0.44	0.41	0.41	0.41	0.36	0.63	0.70	0.0
Adjusted Char	0.62	0.45	0.43	0.37	0.42	0.35	0.33	0.33	0.33	0.29	0.50	95.0	0.61
Decomenation	!	1.26	1.32	1.44	1.55	1.62	1.67	1.85	2.03	3.40	3.69	40.4	3.08
RSHM Liner Thickness	1.776	2.038	2.248	2.458	2.668	2.878	3.098	3.298	3.507	4.055	4.713	169.1	3.863
Hargin of Safety		0.62	0.70	17.0	0.13	0.70	0.85	0.78	0.13	69.0	0.2	91.0	0.25
180 degraes													
Reasured Erosion		0.33	0.38	0.45	0.47	0.59	09.0	69.0	0.61	96.0	1.52	1.71	1.19
Heasured Char	0.84	0.56	0.55	95.0	0.52	0.45	÷ .	0.37	0.41	0.39	0.62	9.79	9.8
Adjusted Char	0.67	0.45	0.44	0.45	0.43	0.36	0.35	0.30	0.33	0.31	0.50	6.63	0.61
Depomentor		1.23	1.31	1.46	1.46	1.63	1.64	1.75	2.03	2.35	3.66	1.31	7.1
RSKM Ciner Thickness	1.776	2.030	2.248	2.458	2.668	2.878	3.086	3.296	3.507	4.055	4.713	1.69.1	3.663
Margin of Safety		0.67	0.72	9.0	0.83	0.77	0.0		0.73	0. J3	6.29	0.11	0.23
270 degrees													-
Meaning Design		0.36	0.40	0.47	0.52	65.0	0.65	0.73	0.83	1.03	1.54	11.11	1.16
Heasured Char	16.0	0.57	9.56	0.53	0.51	0.47	0.44	91.0	 	0.30	9.65	9.0	9.76
Adjusted Char	0.73	9.46	0.45	0.42	0.41	0.38	0.35	0.37	0.35	0.30	0.52	0.53	0.57
Denomenator		1.29	1.36	1.47	1.55	1.65	1.74	1.93	2.10	7.11	3.73	4.00	m
RSRM Liner Thickness	1.776	2.038	2.248	2.454	2.668	2.878	3.0.08	3.294	3.507	4.055	1.713	1.69.1	3.863
Margin of Safety		0.58	9.65	0.67	0.72	0.74	6:77	0.72	0.67	99.0	97.0	6.15	0.73
Minimum margin of safety	-	, e.	station	station 24.00 degree 180.00	3ree 180	00							
Naximum margin of set	=	0.96 at	# C # C T OB	) )		2							

" Heasured char adjusted to end of action time

Table D-IX. 360T025A Cowl/OBR Char and Erosion Data

ø		•						,	,	•	•	•	:
	degrees	m. 0	0.1	2.0	9. M	٠ • •	и. О	0.9	•	•	D.		11.3
HAN	Heather Crosson		0.26	0.33	0.36	6.38	9.36	0.31		9.04	0.03	00.0	0.03
ž	Reserved Ober	0.13	8.0	79.0	69.0	0.62	0.61	0.68	96.0	69.0	0.13	6.19	0.78
Adje	Adjusted Char	99.0	0.43	0.51	9.55	0.50	6 - 49	0.54	0.78	0.71	99.0	6.63	0.62
Dep	Denomenator		1.05	1.30	1.1	1.38	1.33	1.28		1.13	1.03	6.95	0.93
88.8	ther Thickness	1.430	1.199	1.577	1.655	1.733	1.011	1.119	1.943	1.600	1.674	1.617	1.70
HAC	Margin of Safety	! ! !	0.43	0.21	0.13	0.26	90.36	0.43		6.42	6.63	9.78	0.76
9.6	90 degrees			-									
2	Tolana bezusten		0.27	0.30	0.31	0.26	0.27			0.0	0.04	00.0	0.03
Head		0.47	95.0	9.0	.63	0.62	9.0	1.00	1.05	96.0	9.85	0.11	0.83
Adia	Adjusted Char	0.70	94.0	15.0	0.50	0.50	. 51	0.0	70	6.77	0.61	0.30	99.0
Den	Denomenator		1.12	1.24	1.24	1.18	1.10			1.21	1.04	1.06	1.03
a s	t Liner Thickness	1.430	1.499	1.577	1.655	1.733	1.11.	1.189	1.943	1.600	1.674	1.687	1.70
Mar	Margin of Safety		0.34	0.27	0.33	0.47	0.53			0.32	0.55	09.0	99.0
1 80	180 degrees												
A e E	Messured Erosion	0.23	9.36	0.32	0.29	0.26	9.22	0.24	0.24	0.03	0.03	0.00	0.03
Men	Measured Char	0.53	0.54	95.0	0.55	0.62	0.63	0.72	0.11	1.01	96.0	90.0	9.0
Adje	Adjusted Char .	0.42	0.43	0.45	11.0	0.50	0.50	0.50	0.67	0.11	0.77	69.0	0.30
D.0	Denomenator	0.97	1.06	1.20	1.13	1.14	1.07	1.22	1.37	1.24	1.10	1.03	1.09
# S #	1 Liner Thickness	1.438	1.699	1.577	1.655	1.733	1.011	1.849	1.943	1.600	1.674	1.687	2.1
HAS	Hargin of Safety	0.40	0.41	0.31	97.0	0.52	69.0	9.9	0.43	6.29	0.13	0.63	0.57
270	270 dagrees												
N. S. S.	Nessured Erosion	0.23	0.29	0.29	0.36	0.33	0.26	0.23		10.0	9.05	90.0	0.04
20.5	Ressured Char	91.0	0.50	0.61	9.0	0.60	69.0	0.10		76.0		0 . 0	0.13
Adju	Adjusted Char .	0.36	0 + 0	61.0	0.45	0.4.0	0.55	95.0		47.0	6.67	9.0	99.0
Den	Denomenator	P . 0	1.04	1.19	1.20	1.26	1.21	1.19	•	1.19	1.00	1.05	1.06
RSH	t Liner Thickness	1.438	1.199	1.577	1.655	1.733	1.0.1	1.889	1.943	1.600	1.674	1.687	1.70
Hare	Hargin of Safety	6.53	0.39	0.33	0.29	0.34	0.50	0.59		0.35	6.55	19.0	0.61

\* Heasured char adjusted to end of action time



Table D-X. 360T025B Cowl/OBR Char and Erosion Data

Angular Location						Stations	lons					
0 degrees	6.0	1:0	3.0	3.0	• •	9.0	9.9		• •	• •	10.0	11.3
Measured Erosion	0.23	0.30	0 . 29	0.29	0.23	0.21	9.10		0.03	0.00	00.0	00.0
Beasured Char	95.0	0.52	0.54	95.0	19.0	0.64	0.62		66.0	06.0	06.0	6.93
Adjusted Char	0.46	0.42	0.43	9.45	0.51	9.51	0.50		0.79	0.72	0.72	9.74
Denomenator	1.04	1.12	1.12	1.14	1.04	1.06	96.0		1.22	1.04	1.06	1.12
RSHM Liner Thickness	1.434	1.199	1.577	1.655	1.733	1.11	1.89	1.943	1.600	1.674	1.607	1.703
Hargin of Safety	0.31	9.34	0.41	0.45	0.60	0.71	0.93		0.31	6.55	95.0	6.53
90 dagrees								·				
Heasured Erosion	0.28	0.28	0.35	0.34	0.32	0.26	0.25		0.04	0.03	0.03	0.03
Heasured Cher	0.62	0.60	0.52	0.52	0.60	9.0	0.61	1.1.	9.95	0.90		6.95
Adjusted Char	0.50	9.0	0.42	0.42	0.40	0.51	0.54	0.89	9.76	0.72	0.67	9.76
Denomenator	1.10	1.16	1.22	1.20	1.24	1.20	1.19		1.20	1.11	1.05	1.17
RSRM Liner Thickness	1.430	1.499	1.577	1.655	1.733	1.011	1.119	1.943	1.600	1.674	1.687	1.703
Hargin of Safety	0.23	0.29	0.29	0.38	0.10	0.51	0.59		0.33	0.51	09.0	97.0
180 degrees												
Measured Eroston	0.30	0.21	0.25	0.28	0.29				0.03	00.0	0.03	00.0
Measured Char	0.67	0.72	0.68	0.62	0.63	06.0	1.02		60.0	91.0	0.78	0.87
Adjusted Char *	0.54	0.58	9.0	0.50	0.50	0.72	0.13		0.71	69.0	0.62	0.10
Denomenator	1.07	1.14	1.18	1.10	1.21				1.10	1.03	0.97	1.04
RSRM Liner Thickness	1.436	1.499	1.577	1.655	1.733	1.611	1.119	1.943	1.600	1.674	1.667	1.703
Hargin of Safety	0.34	0.31	0.34	0.40	0.43				9 . 46	0.62	0.75	6.63
270 degrees			×		٠							
Reasured Erosion		0.24	0.30	0.31	0.33					0.04	00.0	00.0
Heasured Char	0.00	0.53	0.52	0.48	0.52		1.04		0.95	0.85	0.91	0.95
Adjusted Char .	0.64	0.42	0.43	0.34	0.43	0.70	0.13		0.76	9.0	0.73	0.74
Denomenator		10.1	1.12	1.10	1.16					1.06	1.09	1.10
RSRM Liner Thickness	1.438	1.499	1.577	1.655	1.733	1.0.1	1.119	1.943	1.600	1.674	1.617	1.703
Hargin of Safety		0 . 48	0.41	0.50	0.49					6.55	9.0	9.9
Hinimum margin of safety is Maximum margin of safety is		0.22 at station 0.92 at station	station	6.30 des	6.30 degree 90.90 6.00 degree 0.00	• •						

\* Nessured char adjusted to end of action time

Hargin of Safety a



Table D-XI. 360T025A Fixed Housing Assembly Char and Erosion Data

Assured Erosion 6.07 0.04 0.00 0.00 0.00 0.00 0.00 0.00 0	0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 7.00 8.00 7.00 8.00 7.00 8.00 7.00 8.00 8	Angulai Location						Stat	Stations				
Change   Color   Col	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	800 350p	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.60	00.4		10.75
Likhass 3,807 2,061 1,825 1,827 1,829 1,011 1,020 0,02 0,02 0,74 1,25 1,05 0,94 0,94 0,94 0,94 0,94 0,94 0,94 0,94	0.89 0.92 0.91 0.89 0.72 0.65 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.69 0.73 0.73 0.73 0.69 0.73 0.74 0.74 0.73 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74	Huasured Erosion	0.07	0.04	0.00	0.00	0.00	00.0	0.00	0.00	00.0	0.00	
CKNOWS S. 1.05 0.76 0.75 0.71 0.74 0.73 0.65 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72	0.71 0.74 0.73 0.69 0.72 0.85 0.72 0.85 1.62 1.62 1.62 1.62 1.62 1.62 1.62 1.62	asured Char	1.11	96.0	76.0	6 . 0	0.92	- S	98.0	9 6	20.0		
ickness 3.867 1.06 0.94 0.89 0.92 0.91 0.86 0.90 0.82 0.74 ickness 3.867 2.901 1.015 0.94 1.05 0.99 1.01 1.013 1.014 1.216 2.20 ickness 3.867 2.901 1.015 0.94 1.05 0.99 1.01 1.013 1.014 1.216 2.20 ickness 3.807 2.901 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.09 0.92 0.91 0.86 0.90 0.62 0.74 1.627 1.627 1.629 1.611 1.612 1.834 1.836 2.426 1.05 0.99 0.00 0.00 0.00 0.00 0.00 0.00 0	justed Char .	61.0	0.78	0.75	0.71	0.74	0.73	69.	0 . 72	9 .	ň.	
ickness 3.807 2.081 1.825 1.827 1.829 1.811 1.832 1.834 1.836 2.426 1.89 2.05 0.96 0.96 0.99 1.01 1.13 1.04 1.24 2.28 1.89 1.01 1.13 1.04 1.24 2.28 1.09 2.05 0.99 1.01 1.13 1.04 1.24 2.28 1.09 1.05 0.90 0.00 0.00 0.00 0.00 0.00 0.00 0	1.627 1.629 1.611 1.632 1.834 1.836 2.426 1.05 0.99 1.01 1.13 1.04 1.24 2.28 1.05 0.99 1.01 1.13 1.04 1.24 2.28 0.90 0.00 0.00 0.00 0.92 0.92 0.92 0.93 0.91 0.92 0.94 0.73 0.92 0.92 0.94 0.73 0.92 0.94 0.73 0.92 0.94 0.73 0.92 0.96 0.90 0.90 0.90 0.90 0.90 0.90 0.90	nomenator	1.25	1.06	0.94	0.89	9.92	9.91	98.0	06.0	. 62 0	0.7	
try 1.05 0.96 0.94 1.05 0.99 1.01 1.13 1.04 1.24 2.28 (change 1.05 0.96 0.96 0.99 1.01 1.13 1.04 1.24 2.28 (change 1.05 0.96 0.96 0.90 0.00 0.00 0.00 0.00 0.00	0.05 0.99 1.01 1.13 1.04 1.24 2.28 0.05 0.00 0.00 0.00 0.00 0.00 0.00 0.0	nn Liner Thickness	3.607	2.081	1.825	1.127	1.429	1.431	1.132	1.134	1.136	2.426	3.046
ckness 3.607 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	rgin of Safety	2.05	96.0	0.94	1.05	66.0	1.01	1.13	1.04	1.24	3.38	,
O	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0				-								
Los 1.05 0.95 0.89 0.92 0.92 0.91 0.92 0.91 0.92 0.94 0.73 0.74 0.74 0.74 0.73 0.74 0.74 0.74 0.74 0.73 0.74 0.74 0.74 0.74 0.75 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.9	0.92 0.92 0.94 0.91 0.92 0.94 0.73 0.74 0.73 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95	saurad Erosion	0.00	00.0	0.00	00.00	0.00	00.0	0.00	00.0	00.0	0.00	
ckness 1.05 0.76 0.71 0.74 0.74 0.71 0.73 0.74 0.67 0.59 0.91 0.05 0.95 0.95 0.95 0.95 0.95 0.95 0.95	0.74 0.74 0.71 0.73 0.74 0.67 0.59 0.92 0.92 0.92 0.93 0.94 0.73 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95	Agus of Char	50.4	56.0	69.0	0.92	0.92	69.0	16.0	0.93	10	0.73	1.19
ickness 3.807 2.081 1.825 1.827 1.829 0.91 0.92 0.91 0.92 0.94 0.73  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.06 1.01 0.99 1.19 2.32  ickness 3.807 2.081 1.825 1.827 1.829 1.931 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.931 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.931 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.931 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.931 1.834 1.836 1.936 2.737  in 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.92 0.92 0.99 0.91 0.92 0.94 0.73 1.827 1.827 1.827 1.92 0.94 0.73 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9	justed Char	11.0	0.76	0.71	10.0	0.74	0.71	0.73	9.74	0.67	95.0	1.51
ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.06 1.01 0.99 1.19 2.32  ickness 3.807 2.081 1.825 1.827 1.829 1.06 1.01 0.99 1.19 2.32  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426  ickness 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426	0.99 0.99 1.831 1.832 1.834 1.836 2.426 0.99 0.99 0.99 0.99 1.19 2.32 0.99 0.90 0.00 0.00 0.00 0.00 0.00 0.0	nomenator	1.05	0.95	0.49	0.92	0.92	69.0	16.0	0.93	10	0.73	
ty 2.63 1.19 1.05 0.99 0.99 1.06 1.01 0.99 1.19 2.32 (on 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.99 0.99 1.06 1.01 0.99 1.19 2.32 0.00 0.00 0.00 0.00 0.00 0.00 0.00	RM Liner Thickness	3.807	2.001	1.825	1.827	1.129	1.631	1.032	1.634	1.036	2.426	3.048
ion 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	rgin of Safety	2.63	1.19	1.05	66.0	66.0	1.06	1.01	66.0	1.19	2.33	,
lon 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 degrees			,		•	,					
1.22 1.01 1.06 1.07 1.10 1.14 1.09 1.10 0.08 0.08 0.08 0.08 0.08 0.08 0.08	1.07 1.10 1.14 1.09 1.10 0.86 0.88 0.81 0.87 0.87 0.88 1.07 1.02 1.14 1.09 1.10 1.02 1.10 1.14 1.09 1.10 0.71 0.66 0.61 0.68 0.67 0.00 0.00 0.00 0.00 0.00 0.00 1.01 1.03 1.02 0.96 1.01 0.62 0.77 0.81 0.82 0.82 0.77 1.03 1.02 0.96 1.01 0.66 0.62 1.01 1.03 1.02 0.96 1.01 0.66 0.62 1.01 1.03 1.02 0.96 1.01 0.66 0.62 1.01 0.78 0.80 0.96 1.01 0.62 0.77 1.827 1.829 1.831 1.832 1.834 1.836 2.426 5.00 degree 180.00	asured Erosion	0.03	00.0	00.0	00.0	00.0	00.0	0.00	0.00			
- 0.96 0.81 0.85 0.86 0.88 0.87 0.89 0.89 0.89 1.00 1.10 1.10 1.10 1.10 1.10 1.10 1.1	0.86 0.88 0.91 0.87 0.88 1.00 1.10 1.10 1.10 1.10 1.10 1.10	asured Char	1.22	10.1	1.06	1.07	1.10	1.1	1.09	1.10			
1.26 1.01 1.06 1.07 1.10 1.14 1.09 1.10  zfety 2.02 1.06 0.72 0.71 0.66 0.61 0.68 0.67 1.036 2.426  sety 2.02 1.06 0.72 0.71 0.66 0.61 0.68 0.67  st 1.16 1.14 1.04 1.01 1.02 0.96 1.01 0.82 0.77  ar 0.94 0.91 0.03 0.03 0.04 0.05 0.05 0.96 1.01 0.82 0.77  Thickness 3.807 2.081 1.825 1.87 1.829 1.831 1.832 1.834 1.836 2.426  afety 2.17 0.83 0.75 0.81 0.76 0.80 0.91 0.92 0.95 1.24 2.15	1.07 1.10 1.14 1.09 1.10 1.10 1.10 1.10 1.10 1.10 1.10	justed Char .	96.0	0.81	0.85	9 . 0	9 . 0	0.91	0.87	9 .			
Thickness 3.807 2.021 1.825 1.827 2.829 1.831 1.832 1.834 1.834 1.835 2.426 2.62 2.02 1.06 0.72 0.71 0.66 0.61 0.64 0.67 2.02 1.06 0.72 0.71 0.66 0.61 0.64 0.67 2.82 0.67 2.02 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	somenator.	1.26	1.01	1.06	1.07	0	7	1.09	0	4	1	9
osion 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	RM Liner Thickness rgin of Safety	3.807	1.06	0.72	0.71	0.66	0.61	0.66	0.67	9 7 9 7		
ion 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0 degrees											
1.16 1.14 1.04 1.01 1.03 1.02 0.96 1.01 0.82 0.77 0.94 0.91 0.62 0.77 0.91 0.65 0.62 0.62 0.77 0.91 0.66 0.62 0.62 0.77 0.91 0.66 0.62 0.77 0.91 0.91 0.92 0.77 0.91 0.92 0.77 0.91 0.92 0.77 0.91 0.92 0.77 0.91 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.0	1.01 1.03 1.02 0.96 1.01 0.82 0.77 0.81 0.66 0.63 0.71 0.11 1.03 1.02 0.96 1.01 0.62 0.63 1.03 1.03 1.03 0.96 1.01 0.82 0.77 0.81 0.62 0.77 0.81 0.82 1.83 1.83 1.83 1.83 2.42 0.81 0.78 0.80 0.91 0.82 1.24 2.15	stared Erosion	0.01	00.0	0.00	00.0	0.00	00.00	0.00	0.00	0.0	0.00	
. 0.94 0.91 0.63 0.61 0.62 0.77 0.81 0.66 0.62 1.20 1.20 1.14 1.04 1.01 1.03 1.02 0.96 1.01 0.62 0.77 0.77 1.62 1.01 0.62 0.77 1.62 1.63 1.63 1.63 1.63 1.63 1.63 1.63 1.63	0.81 0.82 0.82 0.77 0.81 0.66 0.62 1.01 1.03 1.02 0.96 1.01 0.82 0.77 1.827 1.829 1.831 1.832 1.834 1.836 2.426 0.81 0.78 0.80 0.91 0.82 1.24 2.15 5.00 degree 180.00	asured Char	1.10	1.14	1.04	1.01	1.03	1.02	96.0	10.1	0.13	0.77	1.70
1.20 1.14 1.04 1.01 1.03 1.02 0.96 1.01 0.82 0.77 1.0knoss 3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426 8ty 2.17 0.83 0.75 0.81 0.78 0.80 0.91 0.82 1.24 2.15	1.01 1.03 1.02 0.96 1.01 0.62 0.77 1.627 1.629 1.631 1.632 1.634 1.636 2.426 0.78 0.70 0.91 0.52 1.24 2.15 5.00 degree 180.00	insted Char .	16.0	0.91	0.03	0.61	0.82	0.93	0.33	0.81	99.0	0.62	1.36
3.807 2.081 1.825 1.827 1.829 1.831 1.832 1.834 1.836 2.426 2.17 0.83 0.75 0.81 0.78 0.80 0.91 0.82 1.24 2.15	1.627 1.629 1.631 1.632 1.634 1.636 2.426 0.61 0.76 0.80 0.91 0.62 1.24 2.15 5.00 degree 180.00	nomenator	1.20	1.14	1.04	1.01	1.03	1.02	96.0	1.01	0.62	۲۲.0	
2.17 0.83 0.75 0.81 0.78 0.80 0.91 0.82 1.24	5.00 degree 180.00	RM Liner Thickness	3.807	2.081	1.825	1.827	1.629	1.831	1.132	1.634	1.136	2.426	3.04
		rgin of Safety	2.17	0.83	0.75	0.11	0.78	0.80	16.0	0.82	1.24	2.15	

\* Measured char adjusted to end of action time

Table D-XII. 360T025B Fixed Housing Assembly Char and Erosion Data

degrees	0.00	1.00	2.00	3.00	1.00	8.00	6.00	7.00	00.	9.00	10.75
Measured Erosion	40.0	0.00	00.0	00.0	0.00	9.00	0.0	00.0	0.00		
Nessured Char	60.1	10.1	1.01	96.0	6.95	1.01	1.03	1.02	0.93	0.72	1.69
Adjusted Cher *	0.87	98.0	0.61	6.77	90.0	0.81	0.12	0.12	0.74	0.5	1.35
		0.	10.1	96.0	9.95	1.01	1.05	1.02	0.93		
ESER Liner Thickness	3.107	2.041	1.125	1.627	1.829	1.631	1.632	1.034	1.136	2.426	3.046
Hargin of Safety	1.15	6.93	0.61	06.0	0.93	0.01	0.74	0.80	0.93		
90 degrees											
1	6	•	6	9	•	00	00 0	0.00	00.0	00.00	
Termeral frontes					0 . A 2		11.0	98.0	0.79	69.0	1.75
Total Control of the	7.0	9	0.72	0.71	0.70	99.0	0.67	69.0	0.63	0.55	1.40
	1.02	1.00	06.0	60.0	0.67			99.0	0.79	69.0	
BSRM Liner Thickness	3.807	2.081	1.625	1.627	1.129	1.631	1.632	1.034	1.036	2.426	3.046
Margin of Safety	2.73	1.04	1.03	1.05	1.10	1.21	1.16	1.13	1.32	2.52	
180 degrees											
Reasured Eroston	0.05	0.0	0.00	0.00	00.0	00.0	00.0	00.0	0.00		
Massured Char	96.0	0.91	0.83	06.0	6.0	0.83	0.01	0.11	0.74	6.65	T
Adjusted Char	0.78	0.73	99.0	0.72	10.0	99.0	0.65	9.65	65.0	0.52	1.13
Denomenator	1.00	0.97	0.63	06.0	69.0	0.13	0.61	11.0	0.74		
RSRM Liner Thickness	3.807	2.001	1.025	1.427	1.829	1.631	1.832	1.134	1.636	2.426	3.01
Margin of Safety	2.52	1.15	1.20	1.03	1.06	1.21	1.26	1.26	1.40		
270 dagrass											
Heasurad Erosion	0.04	0.05	00.0	00.0	00.0	0.00	00.0	00.0	0.00	00.0	
Heasured Char	1.09	1.02	0.17	0.93	96.0	96.0	96.0	0.89	9.78	11.0	1.73
Adjusted Char	0.87	0.82	0.70	9.74	0.75	9.78	0.75	0.71	0.62	6.57	1.31
Denomenator	1.17	1.12	0.87	0.92	96.0	96.0	9.94	6.0	0.78	0.71	
BSRH Liner Thickness	3.807	2.081	1.625	1.427	1.029	1.031	1.632	1.134	1.036	2.426	3.04
Margin of Sefety	2.25	98.0	1.10	66.0	6.95	0.17	\$6.0	1.06	1.35	2.42	
Minimum margin of safety is 0.74 at station Maximum margin of safety is 2.73 at station	ety is	0.74 at 2.73 at	station	6.00 degree	degree 0.00	9 9					

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